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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,647	11/29/2001	Mark A. Kirkpatrick	BS01-300	3214
38516	7590	03/24/2005	EXAMINER	
SCOTT P. ZIMMERMAN, PLLC PO BOX 3822 CARY, NC 27519			ZHEN, LI B	
			ART UNIT	PAPER NUMBER
			2194	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,647

Applicant(s)

KIRKPATRICK ET AL

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2001.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-38 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1 – 38 are pending in the application.

#### ***Claim Rejections - 35 USC § 112***

2. Claims 1 – 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “storage schema” in claims 1 and 9 is used by the claim to mean “a relational database” (i.e. Oracle Database, see claim 9), while the accepted meaning is “a description of a database to a database management system (DBMS) in the language provided by the DBMS. A schema defines aspects of the database, such as attributes (fields) and domains and parameters of the attributes” [*Microsoft Computer Dictionary, Fifth Edition*; p. 465]. The term is indefinite because the specification does not clearly redefine the term. In addition, claim 1 recites “a storage schema coupled to said computer system” [line 5]. Examiner respectfully notes that a schema is stored in a file and it is unclear as to how a file would be coupled to a computer system. At best, a schema is a file stored in the memory of a computer system.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claim 13 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S.**

**Patent No. 6,665,662 to Kirkwood et al. [hereinafter Kirkwood].**

6. As to claim 13, Kirkwood teaches a web server system [Web Server 402; col. 18, lines 40 – 50] comprising:

a plurality of web browser applications [col. 21, lines 1 – 13];

means for performing manipulation service [database concept access API 424 includes processes for manipulating rules; col. 18, lines 10 – 39 and col. 11, lines 50 – 67] on data submitted by said at least one of the web browser applications [standalone client 404 such as a Web browser; col. 18, line 65 – col. 19, line 2];

means for processing web forms [col. 21, lines 40 – 50 and col. 21, line 62 – col. 22, line 10];

means for storing and retrieving a plurality of manipulation rules for performing said manipulation service [database concept access API 424 includes processes for

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manipulating rules, such as to return all rules in the rule table, to return all rules with a given name, to set the definition of a rule with a given name and sequence number, to generate and store a new rule with a given name and definition, to delete a given rule, and to delete rules with a given name; col. 18, lines 10 – 39]; and

means for compiling manipulation rules into said at least one web application in order to perform said manipulation service [generate and store a new rule with a given name and definition; col. 18, lines 10 – 40].

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1 – 12 and 14 – 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirkwood in view of U.S. Patent No. 6,816,864 to Deuser et al. [hereinafter Deuser].**

9. As to claim 1, Kirkwood teaches the invention substantially as claimed including a computer system for use with web-based applications [Web Server 402; col. 18, lines 40 – 50] comprising:

a web browser application [standalone client 404 such as a Web browser; col. 18, line 65 – col. 19, line 2];

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at least one web form [documents; col. 20, lines 49 – 63] running on the web browser;

a web server capable of web-based forms [col. 21, lines 40 – 50 and col. 21, line 62 – col. 22, line 10];

a storage schema [schema; col. 12, lines 52 – 63] coupled to said computer system, wherein said web server is used for manipulating data with rules [database concept access API 424 includes processes for manipulating rules; col. 18, lines 10 – 39 and col. 11, lines 50 – 67] compiled in said web browser from said storage schema [generate and store a new rule with a given name and definition; col. 18, lines 10 – 40]; and

files containing manipulation rules in said storage schema [rule table; col. 18, lines 10 – 40].

10. Although Kirkwood teaches the invention substantially, Kirkwood does not specifically teach a web server capable of processing Java code.

However, Deuser teaches a system and method for handling set structured data through a computer network [see abstract] and a web server [web application server 130, Fig. 1; col. 6, lines 19 – 37] capable of executing Java code [col. 6, lines 38 – 57].

11. It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of a web server capable of executing Java code as taught by Deuser to the invention to Kirkwood because Java is a secure and platform neutral language which makes it useful for programming Web applications because users access the Web from many types of computers.

12. As to claim 23, Kirkwood as modified teaches a computer-readable medium with instructions executable by a processor for providing a manipulation application service for web-based applications [standalone client 404 such as a Web browser; col. 18, line 65 – col. 19, line 2 of Kirkwood], the medium comprising instructions to:

couple a service request [col. 19, lines 3 – 13 of Kirkwood] from a data device to a web server [col. 21, lines 40 – 50 and col. 21, line 62 – col. 22, line 10 of Kirkwood], the request including data to be validated [col. 2, lines 43 – 50 of Deuser];

generate a service session instruction, the service session instruction based at least in part on the service request [col. 23, lines 30 – 45 of Kirkwood];

send the service session instruction to one or more web servers [col. 21, lines 23 – 32 of Kirkwood], the service session instruction corresponding to one or more data manipulation requests from said customer data device [col. 18, lines 10 – 39 and col. 11, lines 50 – 67 of Kirkwood];

compile at least one Java Server Page based on stored manipulation rules in a database [col. 7, lines 29 – 52 of Deuser]; and

send a manipulation service response to the data device, wherein the manipulation service response is based on the service request [generic server adapter 460 retrieves the responses from the VDS 410 through the concept access API 432, which provides an XML document; col. 21, line 63 – col. 22, line 10 of Kirkwood].

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13. As to claim 24, Kirkwood as modified teaches a method of providing manipulation data service with a web-based computer system [standalone client 404 such as a Web browser; col. 18, line 65 – col. 19, line 2 of Kirkwood] comprising the steps of:

calling at least one Java server page from a web application [col. 6, lines 38 – 60 of Deuser];

compiling said at least one Java server page at a web server [col. 7, lines 29 – 52 of Deuser];

retrieving stored manipulation rules from a centralized storage mass coupled to said web server [col. 18, lines 10 – 39 of Kirkwood];

inputting data to a web form [col. 24, lines 47 – 54 of Kirkwood];

submitting the web form to the web browser [col. 20, lines 12 – 30 of Kirkwood];

manipulating data provided from said web application in accordance with said manipulation rules [col. 21, lines 12 – 23 of Kirkwood].

14. As to claim 34, Kirkwood as modified teaches a method for validating data with a web server system [col. 2, lines 43 – 50 of Deuser], the method comprising:

a step for sending a data manipulation service request [col. 19, lines 3 – 13 of Kirkwood] from a web user [col. 21, lines 40 – 50 and col. 21, line 62 – col. 22, line 10 of Kirkwood];

a step for generating a manipulation service instruction [col. 23, lines 30 – 45 of Kirkwood], the service instruction based at least in part on the manipulation service



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request from said web user [col. 18, lines 10 – 39 and col. 11, lines 50 – 67 of Kirkwood];

a step for compiling a Java server page containing Java files into class files [col. 7, lines 29 – 52 of Deuser];

a step for reading data manipulation information from a data schema [col. 18, lines 10 – 39 of Kirkwood];

a step for configuring the data manipulation information in the memory of a running program [generate and store a new rule with a given name and definition; col. 18, lines 10 – 40 of Kirkwood];

a step for directing a JavaScript function [col. 3, lines 8 – 15 of Deuser] in order to execute a manipulation function in accordance with the information read from said data schema [col. 21, lines 12 – 23 of Kirkwood].

15. As to claim 2, Kirkwood as modified teaches the web server comprises an application for compiling at least one Java page including manipulation rules from the storage schema [col. 7, lines 29 – 52 of Deuser].

16. As to claim 3, Kirkwood as modified teaches the web server calls a plurality of Java servlet methods including getManipulationSet(String ApplicationName, String Application Version, String Application User) method and doManipulation(String tag, String value) method [database concept access API 424 includes processes for manipulating rules, such as to return all rules in the rule table, to return all rules with a

given name, to set the definition of a rule with a given name and sequence number, to generate and store a new rule with a given name and definition, to delete a given rule, and to delete rules with a given name; col. 18, lines 10 – 39 of Kirkwood].

17. As to claim 4, Kirkwood as modified teaches the Java servlet methods are compiled into byte code files when the web server is started [col. 8, lines 17 – 22 of Deuser].

18. As to claims 5 and 6, this is rejected for the same reasons as claim 3 above.

19. As to claim 7, Kirkwood as modified teaches the manipulation rules comprise at least three main views of hierarchical organized functions [col. 2, lines 33 – 45 of Deuser].

20. As to claim 8, this is rejected for the same reasons as claim 3 above.

21. As to claim 9, Kirkwood as modified teaches a storage schema in the format of an Oracle database [col. 12, lines 52 – 63 of Kirkwood]. Kirkwood teaches relational database but does not specifically mention an Oracle database. However, Oracle database is a well-known relational database and it would have been obvious to a person of ordinary skill in the art at the time of the invention to use an Oracle database to take advantage of the features of the Oracle database.

22. As to claim 10, Kirkwood as modified teaches the manipulation rules are represented in the form of Lightweight Directory Access Protocol [col. 6, lines 38 – 60 of Deuser].

23. As to claim 11, Kirkwood as modified teaches an Oracle database [see claim 9] and a table-based system of rules organized into three hierarchically organized views [col. 2, lines 33 – 45 of Deuser].

24. As to claim 12, Kirkwood as modified teaches the storage schema is represented by Lightweight Directory Access Protocol and includes three hierarchically organized views [col. 2, lines 33 – 45 of Deuser].

25. As to claim 14, Kirkwood as modified teaches means for initiating a recompiling of said at least one web application [col. 3, lines 28 – 37 of Deuser].

26. As to claims 15 – 17, these are rejected for the same reasons as claims 9, 12 and 11 above.

27. As to claim 18, Kirkwood as modified teaches a schema in the form of Lightweight Directory Access Protocol [col. 2, lines 33 – 45 of Deuser] and a table-

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based system of manipulation rules organized into at least three hierarchically-organized views [col. 2, lines 33 – 45 of Deuser].

28. As to claim 19, Kirkwood as modified teaches the Oracle database [see claim 9] stores manipulation functions stored as hierarchically organized views [col. 2, lines 33 – 45 of Deuser] that are dynamically updateable by an external administrator [col. 4, lines 20 – 28 of Deuser].

29. As to claim 20, Kirkwood as modified teaches the storage schema represented by Lightweight Directory Access Protocol [col. 2, lines 33 – 45 of Deuser] represents manipulation functions stored as hierarchically-organized views [col. 2, lines 33 – 45 of Deuser] that are dynamically updateable by an external administrator [col. 4, lines 20 – 28 of Deuser].

30. As to claim 21, Kirkwood as modified teaches means for compiling Java servlet methods [col. 8, lines 17 – 22 of Deuser].

31. As to claim 22, Kirkwood as modified teaches means to initiate a recompile of a web server in order to load updated manipulation rules [col. 3, lines 28 – 37 of Deuser].

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32. As to claim 25, Kirkwood as modified teaches updating at least a portion of compiled manipulation rules by recompiling at least one Java server page [col. 7, lines 29 – 52 of Deuser].

33. As to claim 26, this is rejected for the same reasons as claim 3 above.

34. As to claim 27, Kirkwood as modified teaches loading at least portion of said manipulation rules into objects [col. 6, lines 38 – 60 of Deuser].

35. As to claim 28, Kirkwood as modified teaches the Java server page directing JavaScript functions [col. 3, lines 8 – 15 of Deuser] in accordance with said manipulation rules [col. 21, lines 12 – 23 of Kirkwood].

36. As to claim 29, Kirkwood as modified teaches periodically recompiling at least one Java server page [col. 7, lines 29 – 52 of Deuser].

37. As to claim 30, Kirkwood as modified teaches deleting class files [col. 2, lines 50 – 65 of Deuser] and recompiling at least one Java server page [col. 7, lines 29 – 52 of Deuser].

38. As to claim 31, Kirkwood as modified teaches loading updated manipulation rules [col. 3, lines 28 – 37 of Deuser].

39. As to claim 32, Kirkwood as modified teaches sending a manipulation result to the web application [col. 21, line 63 – col. 22, line 10 of Kirkwood].

40. As to claim 33, Kirkwood as modified teaches sending a manipulation result to a user of the web application [col. 21, line 63 – col. 22, line 10 of Kirkwood].

41. As to claims 35, 37 and 38, these are rejected for the same reasons as claims 28, 30 and 31 above.

42. As to claim 36, Kirkwood as modified teaches recompiling at least one Java server page [col. 7, lines 29 – 52 of Deuser] with updated manipulation information [col. 3, lines 28 – 37 of Deuser].

**Conclusion**

43. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen  
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